



ANALITE NEP160 TURBIDITY METER for Field and Laboratory Applications



The ANALITE NEP160 is a truly portable turbidity meter. Readings are taken by simply inserting the probe into the stream or media to get an immediate result truly representative of the turbidity level at that point and time. It allows for easy and fast multiple readings at a site to ascertain the real turbidity profile of a stream or water body.

The ANALITE 160 turbidity meter allows the user to set up measurement parameters through a user-friendly menu system displayed on the in-built 2 line alphanumeric display.

Three probes are currently available to suit the ANALITE NEP160 display unit, the NEP260 (ISO7027 to 3,000NTU), NEP280 (retro-scatter to 30,000NTU) and the high temperature rated NEP285 (retro-scatter to 30,000NTU). Other probes may be added to the range from time to time. The probes have a depth rating of 100 meters and the display unit is IP65 rated.

All ANALITE NEP160 compliant probes are “hot swappable” and contain their calibration data in the probe proper thereby avoiding the need to calibrate every time another probe is connected. The NEP160 (and its probes) comes supplied precalibrated however the user can calibrate a probe at any time using the simple menu driven interface. Both 2 and 3 point calibrations can be preformed.

Measurements can be read directly from the display at any time or downloaded to a computer/printer through the RS232 output at user selectable periodic intervals.

The ANALITE NEP160 will power up automatically to its last settings whenever external power is applied making it ideal for logging applications when using the analogue output or RS232 port.

The NEP160 comes complete in a convenient carry case. The carry case can accommodate a probe with a cable length of up to 10 meters, an ac adapter, the display unit, the RS232 cabling and the User Manual.

Specifications:

Range:	0 to 30,000NTU (3,000NTU limit on NEP260, 90° probe) over four ranges automatically determined.
Display:	2 line, 16-character dot matrix alphanumeric liquid crystal display.
Displayed:	Turbidity (NTU) - default Relative Turbidity Reference (NTU) Relative Turbidity REL (Turbidity - Relative Turbidity Reference) Date/Time - default
Reading:	Updated approximately every 1 second.
Averaging period:	0.5 second or 8 seconds nominal – user selectable.
Range Steps:	1 <0.1 to 20NTU 2 <1 to 200NTU 3 <10 to 2,000NTU 4 <100 to 20,000NTU
Resolution	1 0.02NTU 2 0.1NTU 3 1NTU 4 10NTU
Repeatability:	2% ± 1 digit on all ranges.
Data Logging:	User set for one reading every 1 to 90 seconds or minutes. All readings stored in the Notepad.
Notepad: Setup :	100 readings each with time and date. Menu driven, including: – Calibration – Automatic Logging – Analogue Output range selection – Reference Turbidity value – Setting date and time.
Setup Memory:	Non volatile EEPROM.
Clock:	Calendar clock displays date and time.
GLP:	Good Laboratory Practice. All readings as well as calibration constants are stored together with the Time and Date and can be recalled at any time.
Analogue Output:	0 – 2 volts full scale corresponding to preset measurement range. Output impedance 600 ohms nominal.
Power:	Internal: 6V NiMH rechargeable battery. External: 10 to 16V dc, 400mA max. incl. NiMH Charge current. External power connection is via jack plug male with 2.5mm pin. Centre pin is NEGATIVE polarity.
Power Manag't:	Automatic power down perating from batteries after approx. 5 minutes may be selected. Automatic power up when powered externally. Continuous operation of at least 5 hours on a fully charged battery. For normal intermittent operation a full charge may last several days. Low battery indication prior to shut down.

Outputs:	Inbuilt LCD, analogue output and RS232 port.
RS232 Port :	The RS232 port can output readings on request or at preset intervals of time from 1 to 99 seconds or minutes. The Notepad memory can also be downloaded on request. 4800 baud rate, 8 bits, no parity, 1 stop bit, Xon/Xoff protocol.
Dimensions:	187mm x 110mm x 51mm (display unit). 238mm x 32mm dia (probes incl gland).
Weight:	Display Unit 0.5kg. 180° Probe 0.4kg with 5m lead. 90° Probe 0.4kg with 5m lead.
Operating Temp':	0° to 50°C. Operating -10° to 60°C Storage
Humidity:	0 to 90% R.H. operating
Case Rating:	IP65 with all connectors sealed with dust caps (supplied) or probe properly connected and dust caps on remaining two connectors.
Probe Rating:	100 meters water column.
Ordering Info:	
NEP160-1-05R	NEP160 with NEP280 - 180° general purpose probe.
NEP160-2-05R	NEP160 with NEP285 - 180° hi-temp probe.
NEP160-3-05R	NEP160 with NEP260 - ISO7027 90° probe.
NEP160R	Display unit only.

All probes are supplied with 5 meters of cable unless otherwise indicated at time of order.



Specifications subject to change without notice.
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McVan Instruments PTY

ABN 56 007 283 963

58 Geddes Street, PO Box 298, Mulgrave

Victoria 3170 AUSTRALIA

Tel: (+61-3) 9582-7333, Fax: (+61-3) 9560-1164

E-mail: info@mcvan.com, Website: www.mcvan.com

Your distributor: